

ABSTRACT OF THE DISCLOSURE

The present invention relates to a method for processing a photoresist-coated board, a method for manufacturing a stamper for a recording medium and a method for manufacturing a recording medium which can form a fine raised and depressed pattern having a uniform width after development even in the case where a laser beam having a relatively long wavelength is used for forming pre-pits on a recording medium with high accuracy. A photoresist-coated board 108 is constituted by laminating a light absorption layer 108b and a photosensitive material layer 108c on a glass substrate 108a in this order and is exposed to a laser beam 102 by condensing the laser beam 102 onto the photosensitive material layer 108c, thereby forming a raised and depressed pattern corresponding to pre-pits on the the photosensitive material layer 108. When the length of a pre-pit to be formed is shorter than $4T$, for example, the duty ratio of the pulse signal train input to the light modulator 109 is varied within a range from about 50 % to 65 % so that a pulse signal train having a higher duty ratio is generated as the length of a pre-pit to be formed becomes longer and the power of a laser beam is modulated by the thus generated pulse signal train. On the other hand, when the length of a pre-pit to be formed is equal to or longer than $4T$, for example, a pulse signal train having a constant duty ratio is generated independently of the length of the pre-pit to be formed and the power of a laser beam is modulated by the thus generated pulse signal train.